

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) ~~A guide device for an~~ An off-shore drilling installation comprising:

a guide device disposed on the sea bottom;

at least one drilling riser extending from a floating support to said guide device; ~~on the sea bottom said drilling being performable from said floating support using~~

a drill string fitted at its end with a drilling tool passing tool fitted at an end thereof, and configured to pass through said drilling riser and said guide device[[],] to said sea bottom;

said guide device being characterized in that it comprises having a telescopic guide pipe comprising coaxial telescopic guide elements about an axis XX' and of decreasing diameters, the elements being pre-assembled one in another in such a manner that said telescopic pipe elements are suitable for sliding in the direction of said axis XX' one inside another, the smallest diameter, innermost telescopic pipe including at least an outer guide element and an inner guide element, said telescopic guide pipe being extendable from a retracted position wherein substantially all of said telescopic guide elements are disposed substantially within said outer guide element to a deployed position wherein said inner guide element is disposed beyond said outer guide element, said inner guide element being fitted at its an end thereof with breakup means for breaking up the ground suitable for enabling burying said telescopic guide pipe to be progressively buried in the ground sea bottom by and sliding said telescopic pipe guide elements outwards, thereby enabling a said drilling tool at the end of said drill string to be guided more deeply into the ground sea bottom.

2. (currently amended) A ~~guide device~~ drilling installation according to claim 1, characterized in that said ~~smallest diameter innermost pipe~~ inner guide element ~~presents~~ has a diameter substantially equal to the diameter of said drilling riser.

3. (currently amended) A ~~guide device~~ drilling installation according to claim 1, characterized in that said breakup means ~~for breaking up the ground are constituted by~~ includes a multiply-perforated capsule ~~enabling~~ configured to enable at least one of water ~~or~~ and mud to be jetted into the ~~ground~~ sea bottom by being injected into said capsule under very high pressure.

4. (currently amended) A ~~guide device~~ drilling installation according to claim 1, characterized in that ~~it~~ said guide pipe has at least three coaxial telescopic pipe guide elements.

5. (currently amended) A ~~device~~ drilling installation according to claim ~~[[4]]~~ 1, characterized in that each of said telescopic coaxial pipe guide elements ~~presents~~ has a length of from about 50 m to about 300 m, preferably of 100 m to 200 m, and wherein the length of said ~~deployed~~ guide pipe ~~presenting a length of~~ in said deployed position is between about 150 m to and about 600 m, and preferably of 200 m to 300 m.

6. (currently amended) A ~~guide device~~ drilling installation according to claim 1, characterized in that ~~it comprises a said telescopic guide pipe suitable for use in an off shore drilling installation, in which at least one drilling riser extends from a floating support to a said guide device at the sea bottom,~~ wherein said drilling riser ~~deflecting~~ is progressively deflectable

from a substantially vertical position at said floating support to a position that is substantially ~~horizontal or~~ tangential to the horizontal at the sea bottom, said drilling being performable from said floating support via said drilling riser and said guide device in such a manner that ~~the a~~ borehole in the sea bottom is begun at a given angle of inclination α relative to the horizontal ~~that preferably lies in the range of from about 5° to about 60°, and more preferably in the range 25° to 45°, said guide device being characterized in that it comprises a; and~~

wherein said telescopic guide pipe ~~in a buried position in which said telescopic guide pipe in the retracted position or the outer telescopic pipe element when said telescopic pipe is deployed, comprises in succession includes:~~

- a front end ~~resting~~ configured to rest substantially horizontally on the sea bottom;
- a curved intermediate portion buried in the subsoil of the sea bottom with a ~~large~~ radius of curvature, ~~preferably a radius of curvature greater~~ no less than about 500 m; and
- a rear portion that is substantially linear and buried in the subsoil of the sea bottom ~~bed~~ at substantially said given angle of inclination α ;

at least one of said telescopic guide pipe ~~or~~ and said outer telescopic element cooperating with controlled burying means enabling for burying said ~~retracted telescopic outer guide pipe to be buried~~ element in the sea bottom while said retracted telescopic guide pipe is being towed along the sea bottom from its front end, starting from an initial position in which said retracted telescopic guide pipe rests entirely on the sea bottom in a substantially horizontal position, to a ~~said~~ buried position in the subsoil of the sea bottom.

7. (currently amended) A ~~guide device~~ drilling installation according to claim 6, characterized in that said ~~retracted~~ telescopic guide pipe ~~presents~~ has a length of between about

100 m to about 600 m, ~~preferably of 250 m to 450 m, with a~~ and said ~~given~~ angle of inclination α ~~of the guide pipe lying is~~ in the range of from about 10° to about 60° , ~~and preferably in the range~~ 25° to 45°.

8. (currently amended) A ~~guide device~~ drilling installation according to claim 6, characterized in that said front end is engaged in a baseplate including a load and ~~resting~~ rests on a front soleplate such that said baseplate maintains said front end substantially ~~horizontally on~~ horizontal to the sea bottom while ~~it~~ said drilling installation is being towed.

9. (currently amended) A ~~guide device~~ drilling installation according to claim 6, characterized in that said controlled burying means comprise:

- a front soleplate placed on the sea bottom ~~and~~, said front soleplate supporting said front end and being secured thereto to said front end;

- at least one intermediate soleplate supporting at least one of said curved intermediate portion ~~and/or the~~ said rear portion and being secured thereto, ~~of~~ said at least one intermediate soleplate having a surface area that is smaller than that of said front soleplate, ~~preferably a plurality of~~ said at least one intermediate soleplates soleplate being distributed along said intermediate portion and said rear portion ~~of~~ and having a surface area that ~~becomes smaller~~ decreases relative to that of said front soleplate on approaching said rear end; and

- an anchor connected to said rear portion and suitable for becoming buried in the sea bottom when ~~ground under the effect of said~~ traction is applied to said front end.

10. (currently amended) A ~~guide device~~ drilling installation according to claim 6, characterized in that said controlled burying means comprise at least one deflector secured to one of said outer ~~telescopic~~ pipe element ~~of said telescopic guide pipe~~ in said curved intermediate portion ~~or~~ and said rear portion of said retracted telescopic guide pipe~~[[,]]~~; and comprising

plane surfaces; ~~that are preferably symmetrical about a vertical axial plane of said guide pipe in the longitudinal direction when it is in a rectilinear horizontal position, and~~

wherein said plane surfaces and said deflector ~~surfaces being~~ are inclined relative to a horizontal axial plane of said guide pipe when ~~it~~ said guide pipe is in a horizontal position on the sea bottom, said deflector being inclined at an angle in such a manner as to cause said retracted telescopic guide pipe to become buried when it is towed from said substantially horizontal initial position to a said buried position ~~in the sea bottom.~~

11. (currently amended) A ~~guide device~~ drilling installation according to claim 10, further comprising ~~characterized in that it has~~ a plurality of deflectors distributed along the outer ~~telescopic~~ pipe element of said telescopic guide pipe, said plurality of deflectors being inclined at respective angles that become smaller for said deflectors that are closer to said front end.

12. (currently amended) A ~~guide device~~ drilling installation according to claim ~~4~~ 6, characterized in that said controlled burying means comprise:

- secondary pipes for jetting fluid, and said secondary pipes being secured to said telescopic guide pipe, and extending parallel thereto along the underface thereof; and
- said secondary pipes ~~being of~~ having a smaller diameter than that of said telescopic guide pipe and having perforations in their underfaces ~~enabling for~~ permitting a fluid to be

expelled towards the sea bottom when said secondary pipes are fed by [[a]] said fluid under pressure.

13. (currently amended) A ~~guide device~~ drilling installation according to claim 12, characterized in that said secondary pipes have front and rear ends that are connected to the front and rear ends, respectively, of said retracted telescopic guide pipe, communicating with said front and rear ends of said retracted telescopic guide pipe in such a manner as to make it possible to feed ~~them~~ said secondary pipes using a single feed pipe connected to said front end of said guide pipe.

14. (currently amended) A ~~device~~ drilling installation according to claim 1, ~~characterized in that the~~ wherein said guide device comprises:

- a rigid outer top structure covering and holding rectilinear said retracted telescopic guide pipe when it is substantially horizontal and rests on the sea bottom;

- said outer top structure presenting a longitudinal central opening in its bottom face enabling said retracted telescopic guide pipe to become buried in the ~~ground~~ sea bottom when it is towed;

- at least one connection connecting at least the rear portion ~~(33)~~ of ~~the~~ said outer telescopic pipe element of the telescopic guide pipe to said outer top structure in such a manner as to ~~prevent it from becoming~~ limit the depth to which it may be buried beyond a given depth in the sea bottom so as to limit the radius of curvature of said curved portion;

- said outer top structure resting on the ground of the sea bottom, ~~preferably via lateral soleplates situated on either said longitudinal central opening said lateral soleplates preventing said rigid outer structure from becoming buried;~~ and

- said outer structure being secured to said baseplate in which said front portion of the guide pipe is engaged.

15. (currently amended) A ~~guide device~~ drilling installation according to claim 14, characterized in that it has a plurality of flexible connections distributed along the outer telescopic pipe element of said telescopic guide pipe and presenting lengths that become longer for connections that are closer to the rear end of the guide pipe and of lengths that are ~~such~~ sufficient so that said ~~guide pipe presents a said~~ curved portion ~~having~~ has a ~~desired~~ predetermined radius of curvature and a said rear portion ~~that is~~ substantially linear.

16. - 24. (canceled)

25. (New) A method of drilling off-shore using a drilling installation that includes:
a guide device disposed on the sea bottom;
at least one drilling riser extending from a floating support to said guide device;
a drill string having a drilling tool fitted at an end thereof, and configured to pass through
said drilling riser and said guide device to said sea bottom;

said guide device having a telescopic guide pipe which comprises coaxial telescopic guide elements that include at least an outer guide element and an inner guide element, said telescopic guide pipe being extendable from a retracted position wherein said inner guide

element is disposed substantially within said outer guide element to a deployed position wherein said inner guide element is disposed beyond said outer guide element, said inner guide element being fitted at an end thereof with breakup means for breaking up the sea bottom to facilitate burying said telescopic guide pipe in the sea bottom and for sliding said telescopic guide elements outwards, thereby enabling said drilling tool to be guided more deeply into the sea bottom;

wherein the method comprises the steps of:

burying said guide device in the sea bottom while extending said outer guide element of said telescopic guide pipe;

deploying said drill string in co-operation with said drilling tool and columns of tubing via said drilling riser and said guide device buried in the sea bottom; and

drilling a borehole with said drilling tool.

26. (New) A method of drilling according to claim 25, further comprising the steps of:

deflecting said drilling riser progressively from a substantially vertical position at said floating support to a position that is substantially tangential to the horizontal at the sea bottom, said outer guide element co-operating with controlled burying means, said controlled burying means being suitable for burying said outer guide element from an initial position wherein it rests entirely on the sea bottom, to a controlled buried position in the subsoil of the sea bottom, while said telescopic guide pipe is being towed;

placing said telescopic guide pipe in the retracted position in an initial position where it rests substantially horizontally and in rectilinear manner on the sea bottom; and

towing the front end of said telescopic guide pipe in the axial longitudinal direction of said guide pipe, from said initial position to said buried position wherein said outer telescopic pipe element of said telescopic guide pipe comprises in succession:

- a front end resting substantially horizontally on the sea bottom;
- a curved intermediate portion buried in the subsoil of the sea bottom with a radius of curvature of no less than substantially 500 m; and
- a rear portion that is substantially linear and buried in the subsoil of the sea bottom at a given angle of inclination α relative to the horizontal, lying in the range of from about 5° to about 60°;

deploying said telescopic guide pipe with said breakup means while sliding said telescopic guide elements to be progressively buried in the sea bottom;

deploying said drill string in co-operation with said drilling tool and columns of tubing via said drilling riser and said guide device buried in the sea bottom; and

drilling a borehole with said drilling tool so that said angle of inclination α is in the range of from about 5° to about 60° relative to the horizontal when said borehole is begun.

27. (New) A method according to claim 26, characterized in that said controlled burying means comprise:

- a front soleplate placed on the sea bottom for supporting said front end and being secured thereto;
- a plurality of intermediate soleplates supporting at least one of said curved intermediate portion and said rear portion and secured thereto, said plurality of intermediate soleplates having a surface area that is smaller than that of said front soleplate, said plurality of said intermediate

soleplates being distributed along said intermediate portion and said rear portion having a surface area that becomes smaller relative to said front soleplate on approaching said rear end; and

- an anchor connected to said rear portion and suitable for becoming buried in the sea bottom when traction is applied to said front end, and

wherein the method further comprises the step of:

towing the front end of said retracted telescopic guide pipe until said intermediate soleplates are buried in the sea bottom at increasing depth on coming closer to said rear end of said guide pipe so as to obtain a radius of curvature of said telescopic pipe guide of at least substantially 500 m.

28. (New) A method according to claim 26, characterized in that said controlled burying means comprise at least one deflector secured to said outer telescopic pipe element of said telescopic guide pipe in at least one of said intermediate portion and said rear portion of said retracted telescopic guide pipe, said controlled burying means including plane surfaces, and said plane surfaces and said deflector being inclined relative to a horizontal axial plane of said guide pipe when said guide pipe is in a horizontal position on the sea bottom, said deflector being inclined at an angle in such a manner as to cause said retracted telescopic guide pipe to become buried when it is towed from said substantially horizontal initial position to said buried position in the sea bottom; and

the method further comprises the step of:

towing the front end of said retracted telescopic guide pipe until said deflectors are buried in the sea bottom in a horizontal position so as to obtain a radius of curvature of said telescopic pipe guide of at least substantially 500 m.

29. (New) A method according to claim 26, characterized in that said controlled burying means comprise:

- secondary pipes for jetting fluid, said secondary pipes being secured to said telescopic guide pipe, and extending parallel thereto along the underface thereof;

- said secondary pipes being of smaller diameter than said telescopic guide pipe and having perforations in their underfaces for enabling a fluid to be expelled towards the sea bottom when said secondary pipes are fed by said fluid under pressure; and

the method further comprises the steps of:

- injecting gas under pressure into said secondary pipes when it is desired to tow said guide pipe on the sea bottom; and

- injecting a fluid under pressure into said secondary pipes when it is desired to bury said guide pipe in the sea bottom.

30. (New) A method according to claim 26 characterized in that said guide device comprises:

- a rigid outer top structure covering and holding rectilinear said retracted telescopic guide pipe when it is substantially horizontal and rests on the sea bottom;

- said outer structure presenting a longitudinal central opening in its bottom face enabling said retracted telescopic guide pipe to become buried in the ground when it is towed;

- at least one connection connecting at least the rear portion of the outer telescopic pipe element of the telescopic guide pipe to said outer structure in such a manner as to prevent it from

becoming buried beyond a given depth so as to limit the radius of curvature of said curved portion;

- said outer top structure resting on the ground of the sea bottom; and
- said outer top structure being secured to said baseplate in which said front portion of the guide pipe is engaged; and

the method further comprises the step of:

towing the front end of said retracted telescopic guide pipe and said rigid outer top structure secured to said guide pipe until said at least one connection prevents at least said rear portion of said retracted telescopic guide pipe from becoming buried deeper so as to obtain a radius of curvature of said telescopic pipe guide of at least substantially 500 m.

31. (New) The drilling installation of claim 5, wherein each of said telescopic coaxial pipe elements has a length of from about 100 m to about 200 m.

32. (New) The drilling installation of claim 5, wherein the length of said guide pipe in said deployed position is between about 200 m and about 300 m.

33. (New) The drilling installation of claim 6, wherein said angle of inclination α lies in the range of from about 25° to about 45°.

34. (New) The drilling installation of claim 7, wherein the length of said telescopic guide pipe is between about 250 m to about 450 m when in said retracted position.

35. (New) The drilling installation of claim 7, wherein said angle of inclination α of said guide pipe is in the range of from about 25° to about 45°.

36. (New) The method of claim 26 wherein the radius of curvature is less than 1000 m.